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HEWLETT-PACKARD COMPANY
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EXAMINER

BRUCKART, BENJAMIN R

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2155

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/847,382	Applicant(s) CONRAD ET AL.	
	Examiner Benjamin R. Bruckart	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 9, 13, 14, 16, 17 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 13-14, 16-17, 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Detailed Action

Status of Claims:

Claims 1-4, 9, 13-14, 16-17, 21-30 are pending in this Office Action.

Claims 1, 14, 17 are amended.

Claims 27-30 are new.

The objection to claim 22 is withdrawn in light of applicant's amendment.

The 35 U.S.C. 101 rejection is withdrawn in light of applicant's amendment.

Response to Arguments

Applicant's arguments filed in the amendment filed 4/24/07, have been fully considered but are moot in view of new grounds of rejection. See Remarks below.

Applicant's invention as claimed:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Regarding claim 30, a method of providing information related to one or more networks (Huffaker: page 1, Abstract: visualizing network data), the method comprising:

displaying on a display a plurality of filter criteria, wherein the plurality of filter criteria comprises a selectable list of a plurality of status levels (Huffaker: page 10, Fig. 11; Page 3; visualization features);

receiving a user selection of one or more of the plurality of filter criteria, including a selection of at least one of said status levels (Huffaker: page 10, Fig. 11; Page 3; visualization features);

retrieving network device information related to a plurality of network devices in said one or more networks which satisfy said selected filter criteria (Huffaker: pages 8-10; input data); and

creating for display on a single display page a visual representation of said network device information (Huffaker: pages 8-10; visualization features), said visual representation comprising a first segment which is visually distinguishable from a second network segment by indicia (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines), wherein said visual representation of the first and second network segments comprises a plurality of icons representing the plurality of network devices which satisfy said selected filter criteria (Huffaker: pages 8-10; colors, paths, nodes), wherein the indicia does not connect any of the plurality of icons (Huffaker: Fig. 11) and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a first connection between the first and second network segments (Huffaker: Fig. 11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 9-14, 16-19, 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable by Huffaker et al (June 3, 2000) in view of 7,127,743 by Khanolkar et al.

Regarding claim 1,

The Huffaker reference teaches a method of providing information related to one or more networks (Huffaker: page 1, Abstract: visualizing network data), the method comprising:

displaying on a display a plurality of filter criteria (Huffaker: page 10, Fig. 11; Page 3; visualization features);

receiving a user selection of the plurality of filter criteria (Huffaker: page 10, Fig. 11; Page 3; visualization features),

retrieving network device information related to the plurality of network devices in said one or more networks which satisfy said criteria (Huffaker: pages 8-10; input data); and

creating for display on a single display page a visual representation of said network device information (Huffaker: pages 8-10; visualization features), said visual representation comprising a first segment which is visually distinguishable from a second network segment by indicia (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines), wherein said visual representation of the first and second network segments comprises a plurality of icons representing the plurality of network devices which satisfy said filter criteria (Huffaker: pages 8-10; colors, paths, nodes), and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a first connection between the first and second network segments in order to provide a simplified view to optimize network resources (Huffaker: Fig. 11).

The Huffaker reference fails to teach at least one of device type and device status.

However, the Khanolkar reference teaches

displaying on a display a plurality of filter criteria, wherein in the plurality of filter criteria comprises a first selectable list of network device types (Khanolkar: col. 8, lines 66- col. 9, line 13; particular devices) and a second selectable list of a plurality of status levels for each of a plurality of network devices in said one or more networks (Khanolkar: col. 8, lines 66- col. 9, line 13; event types);

receiving a user selection of the plurality of filter criteria, including a selection of at least one of the network device types and at least one of said status levels (Khanolkar: col. 8, lines 66-

col. 9, line 13) in order to allow the user to focus on a particular set of devices or events (Khanolkar: col. 9, lines 6-9).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the visual representation of the network as taught by Huffaker to include filter criteria as taught by Khanolkar because it would allow one to focus on a particular set of devices or events (Khanolkar: col. 9, lines 6-9).

Regarding claim 2, the method of claim 1, wherein said retrieving network device information comprises:

retrieving network segment information for each of said network devices which satisfy said filter criteria (Huffaker: filter to display; limiting display), said network segment information defining which of said first or second network segments to which said each of said network devices is physically connected (Fig.s 9-11).

Regarding claim 3, the method of claim 2, wherein said creating said visual representation of said network device information comprises:

creating said visual representation based on said retrieved network segment information (Huffaker: pages 8-10; input files; page 14).

Regarding claim 4, the method of claim 3, wherein said network segment information includes information related to said first or second segments, and wherein said creating said visual representation of said network device information comprises:

creating said visual representation whereby said visual representation is divided into said first or second segments (Huffaker: Fig. 5).

Regarding claim 9, the method of claim 1, wherein said retrieving network device information further comprises:

retrieving said network device information from a database (Huffaker: pages 1-2).

Regarding claim 10, the method of claim 1, wherein said plurality of filter criteria comprises:

at least one node type (Huffaker: page 3-5; root nodes- non-root nodes).

Regarding claim 11, the method of claim 10, wherein said plurality of filter criteria includes at least one node attribute (Huffaker: page 3-11).

Regarding claim 12, the method of claim 11, wherein said at least one node attribute comprises at least one node status (Huffaker: page 3-11; root or non-root).

Regarding claim 13, the method of claim 1, further comprising: displaying said visual representation (Huffaker: page 1; abstract).

Regarding claim 21, the method of claim 1, wherein the visual representation further comprises a third network which is visually distinguishable from the first and second network segments by indicia (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines, different clusters connected through paths as seen).

Regarding claim 22, the method of claim 22, wherein said visual representation of the third network segment comprises a plurality of icons representing the plurality of network devices which satisfy said selected filter criteria, and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a second connection between the third network segment and either the first or second network segment (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines).

Regarding claim 27, the method of claim 1, wherein the indicia does not connect any of the plurality of icons (Huffaker: Fig. 11).

Regarding claim 14, a network management node connected to one or more networks (Huffaker: page 1, Abstract: visualizing network data), said network management node comprising:

a plurality of modules stored on a computer readable medium (Huffaker: pages 1-2); and

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a database storing information related to a plurality of network devices in said one or more networks (Huffaker: pages 1-2), wherein said plurality of modules are operable to

displaying on a display a plurality of filter criteria (Huffaker: page 10, Fig. 11; Page 3; visualization features);

receiving a user selection of the plurality of filter criteria (Huffaker: page 10, Fig. 11; Page 3; visualization features),

store filter information regarding said selection of filter criteria in the database (Huffaker: page 10; stored customized labels; other storage);

retrieve network device information based on said information from said database (Huffaker: pages 8-10); and

create a visual representation comprising a first network segment which is visually distinguishable from a second network segment by indicia (Huffaker: pages 8-10; Fig. 11), wherein said visual representation of the first or second network segments comprises a plurality of icons representing the plurality of network devices which satisfy said filter criteria (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines), and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a first connection between the first and second network segments (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines).

The Huffaker reference fails to teach at least one of device type and device status.

However, the Khanolkar reference teaches

displaying on a display a plurality of filter criteria, wherein in the plurality of filter criteria comprises a first selectable list of network device types (Khanolkar: col. 8, lines 66- col. 9, line 13; particular devices) and a second selectable list of a plurality of status levels for each of a plurality of network devices in said one or more networks (Khanolkar: col. 8, lines 66- col. 9, line 13; event types);

receiving a user selection of the plurality of filter criteria, including a selection of at least one of the network device types and at least one of said status levels (Khanolkar: col. 8, lines 66- col. 9, line 13) in order to allow the user to focus on a particular set of devices or events (Khanolkar: col. 9, lines 6-9).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the visual representation of the network as taught by Huffaker to include filter criteria as taught by Khanolkar because it would allow one to focus on a particular set of devices or events (Khanolkar: col. 9, lines 6-9).

Regarding claim 16, the network management node of claim 14, further comprising:

a network interface operable to transmit said visual representation of said network device information over the Internet (Huffaker: Fig. 11).

Regarding claim 23, the network management node of claim 14, wherein the visual representation further comprises a third network which is visually distinguishable from the first and second network segments by indicia (Huffaker: Fig. 11).

Regarding claim 24, the network management node of claim 23, wherein said visual representation of the third network segment comprises a plurality of icons representing the plurality of network devices which satisfy said selected filter criteria, and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a second connection between the third network segment and either the first or second network segment (Huffaker: Fig. 11).

Regarding claim 28, the network management node of claim 14, wherein the indicia does not connect any of the plurality of icons (Huffaker: Fig. 11).

Regarding claim 17, a computer readable storage device on which is stored a program, the program performing a method for providing information related to one or more networks (Huffaker: page 1, Abstract: visualizing network data), the method comprising:

displaying on a display a plurality of filter criteria (Huffaker: page 10, Fig. 11; Page 3; visualization features);

receiving a user selection of the plurality of filter criteria (Huffaker: page 10, Fig. 11; Page 3; visualization features),

retrieving network device information based on said selected criteria, said network device information being related to one or more network devices in said the plurality of networks (Huffaker: pages 8-10; input data); and

creating a visual representation a first network segment which is visually distinguishable from a second network segment by indicia (Huffaker: pages 8-10; Fig. 11), wherein said visual representation of the first and second network segments comprises a plurality of icons representing the plurality of network devices which satisfy said filter criteria (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines), and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a first connection between the first and second network segments (Huffaker: Fig. 11 shows a network segments visually distinguishable by space and connection lines).

The Huffaker reference fails to teach at least one of device type and device status.

However, the Khanolkar reference teaches:

displaying on a display a plurality of filter criteria, wherein in the plurality of filter criteria comprises a first selectable list of network device types (Khanolkar: col. 8, lines 66- col. 9, line 13; particular devices) and a second selectable list of a plurality of status levels for each of a plurality of network devices in said one or more networks (Khanolkar: col. 8, lines 66- col. 9, line 13; event types);

receiving a user selection of the plurality of filter criteria, including a selection of at least one of the network device types and at least one of said status levels (Khanolkar: col. 8, lines 66- col. 9, line 13) in order to allow the user to focus on a particular set of devices or events (Khanolkar: col. 9, lines 6-9).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the visual representation of the network as taught by Huffaker to include filter criteria as taught by Khanolkar because it would allow one to focus on a particular set of devices or events (Khanolkar: col. 9, lines 6-9).

Regarding claim 18, the computer readable medium of claim 17, wherein said plurality of filter criteria comprises: at least one node type (Huffaker: page 3-5; root nodes- non-root nodes).

Regarding claim 19, the computer readable medium of claim 18, wherein said plurality of filter criteria comprises: node status, and at least one status level (Huffaker: page 3-5; root nodes- non-root nodes).

Regarding claim 25, the computer readable medium of claim 17, wherein the visual representation further comprises a third network which is visually distinguishable from the first and second network segments by indicia (Huffaker: Fig. 11).

Regarding claim 26, the computer readable medium of claim 25, wherein said visual representation of the third network segment comprises a plurality of icons representing the plurality of network devices which satisfy said selected filter criteria, and wherein said visual representation illustrates connectivity of said displayed plurality of network devices and illustrates a second connection between the third network segment and either the first or second network segment (Huffaker: Fig. 11).

Regarding claim 29, the computer readable storage device of claim 17, wherein the indicia does not connect any of the plurality of icons (Huffaker: Fig. 11).

REMARKS

Applicant has presented amendments to the independent claims as well as new claims directed to a new limitation. The examiner thinks the details on the filter criteria are a step in the right direction but that the limitations detailing the indicia are not and that a design choice or visual aid, such as newly claimed, are discouraged. The new claims add no additional functionality to the invention and do not add substantial meaning to the claims. The indicia can

be interpreted as some visual distinguishing feature and does not have to be interpreted as the dotted or dashed line as in the specification Fig. 4. The lack of a line that does not connect the plurality of icons is apparent in Huffaker with the space as cited previously and repeated here. Such a design choice is not patentable and was known before as cited in the prior art below.

Prior Art

U.S. Patent Publication No 20030195854 by Wittkotter shows a network divided in Fig. 1 where a dotted line is used to show division among the networks (page 5, para 43).

U.S. Patent No. 7,024,419 by Klenk et al teaches a network visualization tool that separates networks based on grids (Figs. 2-5).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 9:00-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin R Bruckart
Examiner
Art Unit 2155

B RB


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER